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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,369

09/18/2003

Charles R. Mahoney

276-77U1

8512

570

7590

01/05/2006

AKIN GUMP STRAUSS HAUER & FELD L.L.P.  
ONE COMMERCE SQUARE  
2005 MARKET STREET, SUITE 2200  
PHILADELPHIA, PA 19103

EXAMINER

PENDLETON, BRIAN T

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 01/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/666,369	<b>Applicant(s)</b> MAHONEY, CHARLES R.	
	<b>Examiner</b> Brian T. Pendleton	<b>Art Unit</b> 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7, 8, 10, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corris et al in view of Sirhan and further in view of Raviv et al, US Patent 5,647,787.

Corris et al disclose a sound actuated doll comprising sound detector 142, band pass filter (amplifier A2, resistors R5, R7, capacitors C1, C2) and a controller (Q1, Q2, voice output unit 46). Corris et al do not disclose a peak integrator for averaging amplitude peaks and outputting a trigger signal based on a predetermined range of the average filtered microphone signal. Sirhan discloses an amusement device comprising a voice activity circuit 90 comprising microphone 92, sensitivity threshold adjust member 96 and potentiometer 100, the purpose of the circuit 90 to actuate a pump based on a voice command received by the microphone 92. Column 5 line 59 – column 6 line 29 disclose that circuit elements 96 and 100 function as a peak integrator for ensuring that sounds that are not loud enough or are too short in duration are not used to trigger the pump. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the peak integrator, as taught by Sirhan, in the apparatus of Corris et al for

Art Unit: 2644

the purpose of improving the sound detection quality and eliminating false triggering. The combination of Sirhan and Corris discloses a motor and sound output by the sound actuated doll. Thus, the combination fails to teach that the controller is configured to receive the trigger signal and provide first and second control output signals and generate an analog sound output signal in response to the trigger signal. Raviv discloses a sound controlled toy comprising microphone 202, microcontroller 200, motor drivers 220, 222, speaker driver 224 and speaker 226, and lights 36. Raviv thereby discloses a microcontroller configured to receive a trigger signal (from pulse shaper 206) and provide first and second digital control output signals (to motor drivers 220, 222, and lights 36) and a sound output (to speaker 226). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Corris et al and Sirhan to include the controller of Raviv for the purpose of providing increased amusement stimulation for the user. Claims 1, 10, and 19 are met. Regarding claim 2, the apparatus of Corris was designed to be responsive to a 14 kHz signal, however it would have been within reasonable experimentation for one of ordinary skill to propose a system responsive to a toy sound in the claimed frequency range for the purpose of constructing a sound responsive toy with the sound being audible to humans. As to claim 3, Raviv teaches a first control output signal for controlling a light and a second control output signal for controlling a motor. As to claim 4, Corris was designed to be responsive to a high frequency sound signal produced by a squeezing a toy baby bottle. Thus, the level of amplitude required to trigger the voice output unit 46 and motor 32 was based on the toy baby bottle. It would have been obvious to one of ordinary skill in the art at the time of invention to use the sensitivity threshold adjust member 92 to select a predetermined range of filtered signals in accordance with the toy baby bottle sound in

Art Unit: 2644

the modified Corris invention, per the teachings of Sirhan for the purpose of tailoring the circuitry to be responsive to the toy sound. Regarding claim 7, Raviv discloses a microcontroller. As to claim 8, there is disclosed a microphone in Corris.

Claims 5, 6, and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corris in view of Sirhan and further in view of Raviv, as applied to claim 4 above, and further in view of Davidson. The combination of Corris, Sirhan, and Raviv does not disclose that the toy noise maker is a rattle shaken to generate the audible sound. In figure 1, Davison discloses a multiple activation crib toy 10 comprising rattle 23, and cartoon figures 50, 60, 70. A musical output and motions of the cartoon figures are actuated in response to noise produced in the crib. Column 5 lines 3-26 disclose that a microphone 100 (mistakenly referenced as '45') detects noises within the crib environment and actuates the musical output via electronic circuitry. Noises resulting from manipulation of the rattle 23 actuates the musical output, which reads on "toy noise maker is shaken to generate the sound." It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Corris, Sirhan, and Raviv to make it responsive to the sound produced by *shaking* a toy rattle, as taught by Davison, for the purpose of increasing the amusement of the user by having an actuating device that makes playful noise and is easier to manipulate than by squeezing a toy. Regarding claims 11-13, in the combination, the first amusement device is the rattle and the second amusement device is the doll assembly of Corris. As to claim 14, Examiner takes Official Notice that it was notoriously well known in the art to provide a bending mechanism to a toy doll. Per claim 15, Raviv teaches a microcontroller. Regarding claim 16, Corris discloses a microphone. As to claim 17, Raviv discloses a speaker.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Corris et al in view of Sirhan and further in view of Raviv et al and further in view of Hoffman. Corris et al disclose a sound actuated doll comprising a sound detector, band pass filter and controller to actuate a motor and voice recording. Corris et al do not disclose a peak integrator for averaging amplitude peaks and outputting a trigger signal based on a predetermined range of the average filtered microphone signal. As stated above, Sirhan discloses an amusement device comprising a peak integrator for ensuring that sounds that are not loud enough or are too short in duration are not used to trigger the pump. It was obvious to one of ordinary skill in the art at the time of invention to include the peak integrator, as taught by Sirhan, in the apparatus of Corris et al for the purpose of improving the sound detection quality and eliminating false triggering. The combination of Sirhan and Corris discloses a motor and sound output by the sound actuated doll. Thus, the combination fails to teach that the controller is configured to receive the trigger signal and provide first and second control output signals and generate an analog sound output signal in response to the trigger signal. Raviv discloses a sound controlled toy comprising microphone 202, microcontroller 200, motor drivers 220, 222, speaker driver 224 and speaker 226, and lights 36. Raviv thereby discloses a microcontroller configured to receive a trigger signal (from pulse shaper 206) and provide first and second digital control output signals (to motor drivers 220, 222, and lights 36) and a sound output (to speaker 226). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Corris et al and Sirhan to include the controller of Raviv for the purpose of providing increased amusement stimulation for the user. The combination of Corris, Sirhan, and Raviv does not disclose that the controller disables the sound detection circuit for a predetermined period of time after receiving

Art Unit: 2644

the trigger signal. Hoffman discloses a voice interruptible alarm device comprising microphone 1, filter 2, rectifier 3, monoflop 7, and IC 5. The user can trigger the alarm device to be interrupted based on a received voice signal through microphone 1. As disclosed in column 6 lines 59-65, the microphone and filter unit 2 are disconnected from the circuitry when the alarm signal is interrupted. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Corris, Sirhan, and Raviv to have the microphone (sound detector) disconnected from the trigger circuitry (band pass filter, peak integrator, controller) during triggering, as taught by Hoffman, for the purpose of preventing the inadvertent re-triggering of the device.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Corris et al in view of Sirhan and further in view of Raviv et al and further in view of Davidson, as applied to claim 11 above, and further in view of Hoffman. The combination of Corris, Sirhan, Raviv, and Davidson does not disclose that the controller disables the sound detection circuit for a predetermined period of time after receiving the trigger signal. Hoffman discloses a voice interruptible alarm device comprising microphone 1, filter 2, rectifier 3, monoflop 7, and IC 5. The user can trigger the alarm device to be interrupted based on a received voice signal through microphone 1. As disclosed in column 6 lines 59-65, the microphone and filter unit 2 are disconnected from the circuitry when the alarm signal is interrupted. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Corris, Sirhan, Raviv, and Davidson to have the microphone (sound detector) disconnected from the trigger circuitry (band pass filter, peak integrator, controller) during triggering, as taught by Hoffman, for the purpose of preventing the inadvertent re-triggering of the device.

Art Unit: 2644

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian T. Pendleton  
Primary Examiner  
Art Unit 2644



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